# Annex - A PATENT SEARCH REPORT

## Title

Design of Airless Tire for Road Bicycle Application

## **Filing Date**

July 25, 2019

#### **Abstract**

The purpose of this innovation is to design an airless tire for road bicycle application. Airless tire is not a very new technology for tires, but it is still not yet applied to road bicycle. The unique thing about road bicycle tires are their very slim design to minimize its contact with the road that will result to a lesser effort for the rider on pedaling and still have higher speed, this slim designs are very prone to holes due to pinches from sharp objects (e.g nails, sharp stones), since road bicycle tire has tube containing air on it, holes will cause tire to flat and affect negatively the bicycle's running performance. This innovation will address the said gaps by designing a road bicycle tire which does not need tube and air.

#### **International Patent Classification**

B60C7/10; B60C7/24

# Keywords

Airless tire, airless bicycle tire, airless tyre, airless bicycle tyre, airless roadbike tire, airless road bicycle tire

# **SEARCH STRINGS AND DATABASES**

Database	Search String	Number of Hits	
	(Ex: ABST/(SHIPPING AND (PACKAGE OR PARCEL OR DOCUMENT) ) AND ICL/(G07F007/00 OR G07F017/00 OR G06Q020/00))	[Ex: 205]	
worldwide.espace.c om	airless AND tire	271	
worldwide.espace.c om	(airless AND tire) AND bicycle	5	
worldwide.espace.c om	(airless AND tyre) AND bicycle	1	
worldwide.espace.c om	airless AND bicycle	8	

patentscope.wipo.in t	(airless AND tire) AND bicycle	3	
patentscope.wipo.in		227	
t	Airless AND tire		
DOCUMENTS CONSIDERED TO BE RELEVANT			

Category*	Document Information			Relevant to claim No.
	Patent No.	Title	Publication Date	
1. X	KR101977349 (B1)	Method for Manufacturing Airless Tire	2019/05/10	Claim 9, claim 10
2. X	JP2018153932 (A)	Method for Producing Airless Tire, and Airless Tire	2018/10/04	Claim 1, claim 6
3. A	US2010295264 (A1 )	Airless, Chainless Bicycle	2010-11-25	Claim 1.1
4. X	US2019160896 (A1 )	AIRLESS FLEXIBLE TIRE WITH TORQUE REDUCING TRACK PATTERN	2019-05-30	Claim 1
5. X	US2019143757 (A1)	AIRLESS FLEXIBLE TIRE WITH Z-TREAD TRACK PATTERN	2019-05-16	Claim 1

## \* Special Categories of Cited Documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

Note: Further references not indicated in this search report may be cited during substantive examination.

CERTIFICATION				
Search Conducted by:	Search Reviewed by:			
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Technical Staff	Manager/Supervisor			